

Claims

- [c1] What is claimed is:
- 1.A liquid crystal display comprising:
a backlight unit comprising:
an optical film positioned above a light source and at
least including a vacuum layer; and
a liquid crystal display panel positioned above the optical
film;
wherein the vacuum layer is used for isolating heat gen-
erated by the light source.
 - [c2] 2.The liquid crystal display of claim 1, wherein the vac-
uum layer includes an upper plate and a lower plate both
formed of transparent materials, and the upper plate and
the lower plate enclose a vacuum.
 - [c3] 3.The liquid crystal display of claim 1, wherein the opti-
cal film includes a diffusion film, a prism, and a diffusion
plate.
 - [c4] 4.The liquid crystal display of claim 3, wherein the vac-
uum layer is positioned between the diffusion plate and
the light source.

- [c5] 5.The liquid crystal display of claim 1, wherein the vacuum layer is positioned between the liquid crystal display panel and the diffusion plate.
- [c6] 6.The liquid crystal display of claim 2, wherein the transparent materials are selected from the group consisting of glass, acrylic and polycarbonate (PC).
- [c7] 7.The liquid crystal display of claim 2, wherein the upper plate is used as a prism.
- [c8] 8.The liquid crystal display of claim 2, wherein the lower plate is used as a diffusion plate.
- [c9] 9.The liquid crystal display of claim 2, wherein the upper plate is used as a diffusion plate.
- [c10] 10.The liquid crystal display of claim 2, wherein the lower plate is used as a prism.
- [c11] 11.The liquid crystal display of claim 1, further comprising a reflecting sheet and a heat sink positioned under the light source.
- [c12] 12.The liquid crystal display of claim 1, wherein light-emitting devices of the light source are selected from the group consisting of cold cathode fluorescent light (CCFL), hot cathode fluorescent light, external electrode cold cathode fluorescent light, and cold cathode flat flu-

orescence lamp (CCFL).